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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,538	01/27/2004	Michael Jude Iosue	ET 98-41 D2	1649
29306	7590	08/20/2004		EXAMINER
				DONG, DALEI
			ART UNIT	PAPER NUMBER
				2879

DATE MAILED: 08/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/765,538	IOSUE, MICHAEL JUDE
	Examiner Dalei Dong	Art Unit 2879 Pm

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 27 January 2004.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 16-19 and 27-29 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 16-19 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) 27-29 are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 27 January 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. During a telephone conversation with Thomas F. Marsteller Jr. on August 12, 2004 a provisional election was made without traverse to prosecute the invention of a method of making an image intensifier tube, claims 16-19. Affirmation of this election must be made by applicant in replying to this Office action. Claims 27-29 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

This application contains claims directed to the following patentably distinct species of the claimed invention:

Specie I        Claims 16-19;  
Specie II        Claims 27-29.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, there is no generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include

all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 16 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,493,111 to Wheeler.

Regarding to claim 16, Wheeler discloses in Figures 1-4, a method of making an image intensifier tube (10), said method including the steps of: providing an annular tube body (12 and 50); providing a microchannel plate (20) disposed within said tube body (12 and 50); providing an electrical contact structure (90) between said tube body (12 and 50)

and said microchannel plate (20); providing a yieldably deformable and axially-variable sealing structure (52') sealingly uniting the tube body (12 and 50) with a window member (16), said window member (16) carrying a photocathode (18) and yielding said axially-variable sealing structure (52') while maintaining a selected fine-dimension spacing between the photocathode and microchannel plate.

Regarding to claim 19, Wheeler discloses in Figures 1-4, the step of providing yieldably deformable electrical contact structure (90) between said tube body (12 and 50) and the said microchannel plate (20).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,493,111 to Wheeler in view of U.S. Patent No. 5,338,927 to de Groot.

Regarding to claim 17, Wheeler discloses in Figures 1-4, a method of making an image intensifier tube (10), said method including the steps of: providing an annular tube body (12 and 50); providing a microchannel plate (20) disposed within said tube body (12 and 50); providing an electrical contact structure (90) between said tube body (12 and 50)

and said microchannel plate (20); providing a yieldably deformable and axially-variable sealing structure (52') sealingly uniting the tube body (12 and 50) with a window member (16), said window member (16) carrying a photocathode (18) and yielding said axially-variable sealing structure (52') while maintaining a selected fine-dimension spacing between the photocathode and microchannel plate.

However, Wheeler does not disclose forming fine-dimension spacing structure extending axially between said photocathode and said microchannel plate. de Groot teaches in Figure 2, a fine-dimension spacing structure (25) extending axially between said photocathode (6) and said microchannel plate (7) (column 4, lines 51-57) for the purpose of preventing any change in the distance between photocathode and the microchannel plate during the operating lifetime of the image tube.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilize the fine-dimension spacing structure of de Groot for the image intensifier tube of Wheeler in order to prevent changes in the distance between the photocathode and the microchannel and thus maintain a precise distance between the photocathode and the microchannel plate during the operating lifetime of the image intensifier tube.

Regarding to claim 18, Wheeler in view of de Groot discloses the claimed invention except for the fine-dimension spacing structure is formed integrally with the photocathode. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the fine-dimension spacing structure integral

with the photocathode, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following prior art are cited to further show the state of the art of method of making an image intensifier tube.

U.S. Patent No. 5,319,189 to Beauvais.

U.S. Patent No. 5,514,928 to Niewold.

U.S. Patent No. 5,581,151 to Wheeler.

U.S. Patent No. 5,697,826 to Kim.

U.S. Patent No. 6,066,020 to Devoe.

U.S. Patent No. 6,198,090 to Iosue.

U.S. Patent No. 6,483,231 to Iosue.

U.S. Patent No. 6,724,131 to Iosue.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalei Dong whose telephone number is (571)272-2370. The examiner can normally be reached on 8 A.M. to 5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (571)272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D.D.  
August 13, 2004



Joseph Williams  
Primary Examiner  
Art Unit 2879